

**In The Claims**

Replace the pending claims with the correspondingly numbered claims below. Amended claims are indicated by parenthetical text.

Claims 33 and 34 are amended.

Add new claims 35-58.

33. (Amended) A method of screening substances for an ability to affect TRRE activity, comprising:

- But D2*
- a) incubating TNF receptor or cells expressing TNF receptor with the substance and with a polypeptide that causes TNF receptor to be cleaved in the absence of the substance;
  - b) measuring any TNF receptor cleaved; and
  - c) correlating any increase or decrease of the receptor cleaved by the peptide with an ability of the substance to enhance or diminish TRRE activity.
- C1*

34. (Amended) The screening method of claim 33, wherein the polypeptide contains SEQ. ID NOS: 147-149, 151, or 153-154, or fragment thereof which causes increased release of TNF receptor from human cells in which TNF receptor is expressed.

35. (New) The screening method of claim 33, wherein the polypeptide has at least one of the following properties:

- But D2*
- i) it comprises a sequence encoded in the longest open reading frame of SEQ. ID NOS: 1-10 or fragment thereof;
  - ii) it is encoded by a polynucleotide that hybridizes under stringent conditions to a polynucleotide having a sequence selected from SEQ. ID NOS: 1-10;
- C2*
- and wherein the polypeptide causes increased release of TNF receptor from human cells in which TNF receptor is expressed.

36. (New) The screening method of claim 33, wherein the polypeptide has been obtained by purifying TRRE from human cells that express it endogenously.

37. (New) The screening method of claim 33, wherein the polypeptide has been obtained by expressing a recombinant polynucleotide.

38. (New) The screening method of claim 33, wherein the polypeptide has metalloprotease activity.

39. (New) The screening method of claim 35, wherein the polynucleotide comprises a sequence selected from the longest open reading frame of SEQ. ID NOs: 1-10 or fragment thereof.

40. (New) The screening method of claim 35, wherein the polynucleotide hybridizes under stringent conditions to a polynucleotide having a sequence selected from SEQ. ID NOs: 1-10.

41. (New) The screening method of claim 35, wherein the polynucleotide comprises the sequence of the longest open reading frame of SEQ. ID NO:1 or fragment thereof

42. (New) The screening method of claim 35, wherein the polynucleotide comprises the sequence of the longest open reading frame of SEQ. ID NO:5 or fragment thereof

C2.  
Cont.  
43. (New) The screening method of claim 35, wherein the polynucleotide comprises the sequence of the longest open reading frame of SEQ. ID NO:6 or fragment thereof

44. (New) The screening method of claim 35, wherein the polynucleotide comprises the sequence of the longest open reading frame of SEQ. ID NO:8 or fragment thereof

45. (New) The screening method of claim 35 wherein the polynucleotide comprises the sequence of the longest open reading frame of SEQ. ID NO:9 or fragment thereof

46. (New) The screening method of claim 35, wherein the polynucleotide comprises the sequence of the longest open reading frame of SEQ. ID NO:10 or fragment thereof

47. (New) The screening method of claim 35, wherein the polynucleotide hybridizes under stringent conditions to a polynucleotide having the sequence of SEQ. ID NO:1.

48. (New) The screening method of claim 35, wherein the polynucleotide hybridizes under stringent conditions to a polynucleotide having the sequence of SEQ. ID NO:5.

49. (New) The screening method of claim 35, wherein the polynucleotide hybridizes under stringent conditions to a polynucleotide having the sequence of SEQ. ID NO:6.

50. (New) The screening method of claim 35, wherein the polynucleotide hybridizes under stringent conditions to a polynucleotide having the sequence of SEQ. ID NO:8.

51. (New) The screening method of claim 35, wherein the polynucleotide hybridizes under stringent conditions to a polynucleotide having the sequence of SEQ. ID NO:9.

52. (New) The screening method of claim 35, wherein the polynucleotide hybridizes under stringent conditions to a polynucleotide having the sequence of SEQ. ID NO:10.

C2  
Cont.  
53. (New) The screening method of claim 33, wherein the substance is incubated with p55 TNF receptor in step a).

54. (New) The screening method of claim 33, wherein the substance is incubated with p75 TNF receptor in step a).

55. (New) The screening method of claim 33, wherein the substance is incubated with a cell expressing p55 TNF receptor in step a).

56. (New) The screening method of claim 33, wherein the substance is incubated with a cell expressing p75 TNF receptor in step a).

57. (New) The screening method of claim 33, wherein the measuring of TNF-R cleaved in step

b) comprises measuring binding capacity for TNF on the surface of the treated cell.

58. (New) The screening method of claim 33, wherein the measuring of TNF-R cleaved in step

b) comprises measuring the concentration of soluble TNF-R in culture medium from the treated cell.